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News * Serving DX'ers since 1933 *

Volume 64, No. 20 - March 3, 1997 (ISSN 0737-1659)



Inside	14 Formats
2 DDXD	17 Confirmed DX'er
11 IDXD	19 KRSN
13 WBRW	20 Target DX

CPC Test Calendar				
KFGO	ND	790	Mar. 3	0100-0130
WEST	PA	1400	Mar. 10	0000-0030
KSLQ	MO	1350	Mar. 17	0100-0130
KKFJ	CA	570	Mar. 23	0300-0400
WEGP	ME	1390	Mar. 29	0300-0330
WHK	OH	1420	April 7	0300-0330

WWCN-770 - P. O. Box 9600 - Estero, FL 33928 will conduct DX tests from 0030-0100 am EST on March 3, 4, 5, 6, 10, 11, 12, 13, 17, 18, 19, 20, 24, 25, 26, and 27. at 1,000 watts directional between 12:30 and 1:00 am EST January through March. The tests will include Morse code IDs inserted during their regular programming of old-time radio serials and vintage comedy. Reception reports may be sent to Mr. "Joey C.", Program Director. Arranged by J. D. Stephens for the IRCA CPC.

From the publisher ... NRC ANARC rep Dave Schmidt will again be attending the Winter SWL Fest at Kulpsville, PA, March 13-14-15, and any other NRC'er who also would like to attend should contact Dave to coordinate NRC representation. Hotel reservations should be made with the Holiday Inn - 215-368-3800; rates are \$59 single, \$64

double. Registration is \$35, which includes forums, the hospitality room, lunch, and banquet, or \$17 (hospitality room but not meals, and \$19 for spouse (hospitality room and meals. For more info, contact ANARC at Winter SWL Fest - Box 591

- Colmar, PA 18915.

We mentioned the air nav web site in the January 13 DX News, and Jeff Multer says that the address of the site has already changed to http:// www.airnav.com. 'The site provides for searching for both low frequency and VHF navigational aids by Morse code ID, letter ID, and by frequency," Multer said. 'The nav aid information also identifies what airport the aid is associated with. By checking the airport search feature, you can also obtain the administrative address for every U.S. airport. The airport information is more comprehensive than the standard pilots' facilities direc-

Andy Rugg is looking for a replacement copy of a historical article entitled "The Great Frequency Change of 1941". The original appeared in a hobby publication quite awhile ago, and the exact source and date are unknown. Andy's copy has gone astray. If you can help, write to Andy Rugg - 375 Ivan Crescent - Cornwall, ON K6H 7C7.

Welcome to these new members ... Robert I. Warley, Jr. - East Hampton, CT; Robert West, Prattville, AL; Joseph B. Martin, Beach Park, IL; Otis R. Blaumanis, Sparks, MD; Jim Donelson AB4IF, Lantana, FL; Bogdan Zarski, Fala Electron-ics, Milwaukee, WI. I should note that we have lost a significant number of members since December. If we're not meeting your needs (perhaps it was something we said?) please drop the publisher a card indicating what we're not doing right to keep you a member in the world's oldest and largest MW club.

IRCA Convention ... Mike Sanburn is hosting the 1997 IRCA "Mega-Convention" at the Holiday Inn Bristol Plaza, Costa Mesa, CA July 25, 26, and 27. The registration fee is \$35, and room rates are \$60 per night, per room (not per person), and those rooms include a king and sofa bed OR two queen beds. The hotel is located right off the southbound Bristol offramp of the 405 San Diego Freeway (3131 South Bristol - Costa Mesa, CA 92626, 714-557-300, FAX 714-957-8185. For more info you can contact Mike at 310-614-1444 nights, or P. O. Box 1256 -Bellflower, CA 90707.

DXN Publishing Schedule, Volume 64 Deadline Pub. Date 21. Feb. 28 Mar. 10 May 9 May 19 22. Mar. 7 27. Mar. 17 June 13 June 23 23. Mar. 14 Mar. 24 28. July 11 July 21 24. Mar. 28 29, Apr. 1 Aug. 8 Aug.18 25. Apr. 11 Apr. 21 30. Sept. 12 Sept. 22

DX Time Machine

From the pages of DX News: 50 years ago ... from the February 22, 1947 DXN: The text was published of a letter by Carroll H. Weyrich of the Newark News Radio Club to Broadcasting Magazine regarding "the increasingly irksome all-nighter situation". The following were proposed: 1. All 24-hour stations remain silent from 1 to 6 am at least two weeks every month; 2. All monitoring companies establish frequency checking schedules during the silent periods; or 3. All stations wishing to operate 24 hours be assigned a special frequency in the BCB.

25 years ago ... from the February 26, 1972 DXN: Mike Collins, Startford, CT reported tentatively hearing KEAR-660 Fairbanks, AK on February 2, but then, after receiving a non-confirmation from KFAR, said that perhaps the EE program he heard could have been R. Lumiere, Haiti, instead.

10 years ago ... from the February 23, 1987 DXN: Don Moman reviewed the Kenwood R-5000.

West: Bill Hale phantom2@cyberhighway.net hetween East and

301 Boulder Bluff - San Marcos, TX 78666-8350

East: David Yocis DavidYocis@aol.com

David Yocis - 97 Clinton Ave. - South Nyack, NY 10960

DX Catches in the U.S. and Canada, with 24-br. ELT

Central time zones)

DDXD-West MEDIUM WAVE RAMBLINGS

- Sincere condolences go out to Wayne McRae, whose wife lost her battle with cancer. Our thoughts and prayers are with you, Wayne.
- ☐ Sorry about missing last issue, but we were out house hunting in the metro Dallas area. We have a few mailed reports as well as some E-Mail I found at the old Wazoo site to pass along this
- Craig's built himself a new three-foot loop, and says the nulls are deeper and it's quieter than his four-footer. But he didn't say what kind of radio he's using!! Results below. Thomas Reiser of Chicago writes: "I have a couple of corrections for contributions made by Christos Rigas and Barry Finkel in the 1/27 DDXD-West Special section. WPGE863 - If this is truly for Lake Cook Road, there is only one Lake Cook Road Station, which is in Deerfield, Illinois . . . WTED863 -There is no Hickory Street stop on the Metra System. There is, however, a Hickory Creek Stop which is at 9430 Hickory Creek Drive in Mokena." Thanks to Eric Cooper of Mission Viejo, California for a couple of Internet reports regarding the 540/540/1260 questions in Southern California/Baja California Norte ... "There has been no ownership change. K-NEWS just wasn't getting the ratings we needed to maintain the format. We decided to go to a music format and as a transition, we'd play all Beatles for a new format. The response has been so great that we are going with it. We still have to use KNNZ and KNNS until the FCC gives us the OK to officially use the KGIL calls. We can call the station anything we want, it's just that at the top (and with the Mexican signal at the bottom) of the hour we have to use the legal calls. It will change in a few weeks." This blurb is from Jim Roope of KGIL. Also on this subject, Tim writes: "Latest news on K-Bach AM 5-40 is that their target date is now between mid-February and March 1st. Flooding in Sacramento apparently delayed delivery of an antenna to the XETIN facility in Tijuana. An article in the San Diego Union implied that XETIN would be raising power to 25 kW. In the meantime, XETIN has been silent most days, and I have heard no signs of testing on 540 or 1650." And Shawn and Wayne, between catching snowflakes on their tongues, say: "Now that was a DXPedition. We tramped out to find both of the East beverages missing. The lead in wire was there but no sign of the antenna. I dug around outside for about 30-45 minutes in -15 C temps but to no avail. Hey, with 2-4 feet of snow on the ground it would have been easier to find a needle in one of the hay bales on the field that 22 gauge wire!! Oh well, the rest worked well and as you see we got many new ones including KWOF Waterloo, IA my #2000!! I had wanted to hear 2000 by the year 2000 so I'm early. We got a bit of a surprise when the skies cleared and the temps went down to -26C. Well at least the cars started in the morning. Slow but started. Had a lovely 60 mile drive home in blowing snow just to cap it off. We did see one new thing at the farm. A HUGE owl decided to look for food about 150 feet from the DX bus. I have never seen one that size. We stopped DXing to watch it catch two field mice. Wing span was at least 6 feet! Beautiful bird. That and great B-B-Q for supper made it extra special. Will try for one or two in March."
- ☐ I received a card from Morris Sorensen where he asked what happened to his GYDXA record for CFYK-1340. It appears that one line was omitted from the 1340 list in Issue 16. The entire CFYK listing is included at the end of this column. Sorry, Morris.
- ☐ A small, but dedicated, band of DXers make up our reporting cadre this week. Join them!

REPORTERS

- Peggy Leifert Woodbridge Superadio III PL-IL
- John Wilkins Wheat Ridge Drake R8 + 4' loop or 800' SE/NW Beverage TW-CO
- Craig Barnes Wheat Ridge unknown rx + 3' loop CB-CO
- CB-CO1 Craig Barnes 4 miles west of Broomfield unknown rx + 1800' NW-SE long wire or 1500' ENE-WSW long wire
- WH-CO Wayne Heinen Aurora TRF 12-655 with O-Stick

Terry Iones Plankinton DX-390 + Select-A-Tenna TI-SD

John Reed, KA5QEP Ponca City modified Sylvania R1414/URR + noise-reduced JR-OK

wire + Palomar loop phased with ANC-4, Kiwa MW loop <itreed@iamerica.net>

Shawn Axelrod Winnipeg ICOM ICR-70 With filter mods and PLAM board + 4 SA-MB foot box loop / Quantum Loop / 100 foot long wire <saxelrod@mb.sympatico.ca>

Wayne McRae and Shawn Axelrod Valhalla Beach DX Site 2-ICOM ICR-70 with VALDX filter mods and PLAM board + 8 Beverages going south, east, and west

Jon Ellis Superior <jellis@student.uwsuper.edu IE-WI

Tim Hall Chula Vista ICF-2010, KIWA Loop kiwalloop halls@inetworld.net> TRH-CA

BK-CA Bob Karchevski Sunnyvale Drake R8-A with SM-1 (loop) < karchev@nt.com>

Internet resources **INet**

Editor near the DFW IAP Delco AM\$/FM\$ caradio Ed.-TX

SPECIAL

- 550 KTRS MO St. Louis 1/30 2144 Fair-to-poor with local talk program and ads into ABC news. Now local talk. Ex: KSD. NEW! (SA-MB)
- 610 KZSS NM Albuquerque Drops // FM AOR format for WW1 Imus, and motivational programs the rest of the day. (WH-CO)
- 630 WDGY WI Hudson 2/16 0940 Poor-to-fair with NOS or BBD music. WDGY ID. Back on the air from a new city and state. NEW. (VALDX)
- 710 KNUS CO Denver Drops AP for CNN. (WH-CO)
- 750 KBNN MO Lebanon 2/1 0758 Fair with an ID as KBNN Lebanon 7-50 on your AM dial. Local ads for Springfield and area. Ex: KJEL. NEW!! (SA-MB)
- WI Eau Claire 1/2 1838 Fair under CIGM and KFGO, with their new talk 790 WAYY format. Ex: WEAO. NEW!! (SA-MB)
- CO Denver 1/29 1040 Noted totally off. Sadly, unable to hear anything on 850 (KOA) 850 other than local 670/760 mixing product. #"@&\$! KOA back on at 1103.
- 860 KCNR UT Salt lake City 1/29 1058 With Radio Disney programming. Legal ID at 1101. Good signal, with no KOA slop, the latter being off for unknown reasons. So, is SLC the only major market with two stations with a KID format? (JW-CO)
- IL Chester 2/16 Is back on the air simulcasting the FM programs and format, 980 KSGM but will be doing original programming soon. (INet)
 - TX Rosenburg 2/20 Changed from Kidstar to Tejano // KRTX. (INet) **KMPQ**
- TX Liberty 2/16 Now these CLs, ex: KPXE. (INet) 1050 KCHN
- TX Highland Park 2/17 According to Al Brumley in the Dallas Morning 1150 KDFF News, this station went off the air at 2:12 PM local on 2/10, while preparing for their format change to . . . All Traffic, All The Time (at least during AM and PM drive times). CNN Headline News will fill the gaps at noon, evenings, overnight, and on weekends. I listened to 1150 while in the afternoon race today, and the channel was fairly quiet. So they're either not on vet, or their 1000 watts doesn't cover DFW IAP. Ex: BBd. [Ed.-TX]
- 1190 KFEZ MO Kansas City 2/15 The Kansas City Star reported today that on March 3rd, KFEZ and KNHN will swap formats. KNHN owner Bill Johnson assumed control of KFEZ in an LMA in September, quickly dumping KFEZ's distinctive stereo MOR format for a "Music of Your Life" satellite feed Johnson closed on his purchase of KFEZ in October. The 1340 synchronous arrangement will remain, but the stations will broadcast the MoYL satellite relay, according to the Star report. Oddly enough, the newspaper report said the station at 1190 would assume the call letters of KPHN, not KNHN. (INet)
- 1230 WKLK MN Cloquet Changes to a satellite fed Nostalgia format. (JE-WI)
- 1280 KRRF CO Denver Drops BBC News for NBC. (WH-CO)

TOO HIGH TO BE LEGAL

1620 KDAA MO Rolla - 2/1 0540-0805 - Found this while searching for KXBT, with a mixture of contemporary hits by Phil Collins, Joe Jackson, Richard Marx, Counting Crows, etc. Signal was strong, but fairly distorted at times. Simulcast of KMOZ 97.5. Many K-Day IDs along with KDAA, KMOZ, K-Day just before 0805. I called station and they said they do not broadcast on 1620 and have no plans to move to the expanded band. Did anyone besides my brother and me hear this? (PL-IL)



790

1610

1630

KNNB350

WPGE863

WPGE863

WPGE863

TIS

OLDIES

UNIDs and UNID HELP

850 UNID	?? - 2/16 0640 - Very strong TTs that went on for over 30 minutes, but never
	an ID. Over KOA. (VALDX)

879.8 UNID

?? -1/24 1919 - With Mike Reagan syndicated program. Local ads at 1919 and 1930, but couldn't make much out of them. Looped NW-SE and building in strength, so maybe Pacific Northwest. Het disappeared at 1957, so maybe signed off/cut power/jumped back on frequency/whatever (IW-CO)

1380 UNID ?? -1/24 1955 - With high school BKB tournament, possibly called "Great Plains" tournament: Washington vs Sterling. Heard next night with Sterling vs ???. Seems to loop SE. (JW-CO)

1510 UNID ?? - 2/15 1750 - Poor, with Gospel music and a mention of playing your favourite gospel hits. (VALDX)

1610 UNID ?? - 2/16 0745 - Poor, in a mess, with info on an un-named airport and its parking facilities. On west wire. (VALDX)

1610 UNID ?? - 2/16 0750 - Poor, with a woman talking about a park with a lake waterfall and I think . . . icefields?? Possible 536 phone number. On west wire only. (VALDX)

1639.4UNID ?? -2/15 2258 - Very poor, with lots of light rock but no ID's. Did Green Acres pirate move down from 1639.9?? (VALDX)

1680 UNID

?? - 2/16 2300 - Very poor, with two men in SS doing a game pbp. Heard again 2/16 0708 with man and woman talking in SS and playing music.

Mentions of La Musical. (VALDX)

DX AND EOUIPMENT TESTS

640 WBOW+ IN Terre Haute - 2/16 0030 - Poor, with possible trumpet music?? CIDs at 0035 and 0039 mixing with CHOG, the Cuban, KGVW, KFI and WMFN. NEW. (VALDX)

WHLO+ OH Akron - 2/10 0113 - Noted one or two CIDs and TTs under strong KFI.

Rough copy, but enough to put it in the logbook. OH #7. (JW-CO)

1070 KHMO+MO Hannibal - 2/17 0109 - Long string of Morse code IDs. Excellent conditions tonight, but surprisingly weak for 5 kW. New. (TRH-CA)

TIS & OTHER STUFF

530 WQO624 ND Devils Lake - 2/15 1645 - Poor-to-fair, with road and weather news for the North Dakota area. Back to these calls. Only used WTO624 briefly. (VALDX)

TX Ovilla - 2/18 all day - Good, with typical community info. [Ed.-TX]

IL Chicago - 2/15 1950 - Poor-to-fair, mixing with the Anchor Lake, Minnesota TIS, with info on the Eisenhower Expressway. (VALDX)

1610.3 TIS KS -1/30 1942 - Kansas turnpike weather and information station. (JR-OK)
1620 WNWZ910 IL Bensenville - 2/15 2005 - Fair, with info and lots of phone numbers for

IL Bensenville - 2/15 2005 - Fair, with info and lots of phone numbers for Bensenville. (VALDX)

IL Deerfield - 2/15 1920 - Fair-to-good, with info on the METRA rail system. This is a very distinctive TIS as you can here a pulsing tone and train whistles before or after each announcement. We could hear all three at the same time as they are nicely out of sync. At one point you could hear the tones from one the whistle from another and the announcements of the third. These became a pest as they were in almost all night and until about 0900 the next morning. On occasion, they fought with KXBT on the west wires. NEW. (VALDX)

IL Mokena - 2/15 1920 - Fair-to-good, with info on the METRA rail system. This is a very distinctive TIS as you can here a pulsing tone and train whistles before or after each announcement. NEW. (VALDX)

IL Schaumburg - 2/15 1920 - Fair-to-good, with info on the METRA rail system. This is a very distinctive TIS as you can here a pulsing tone and train whistles before or after each announcement. NEW. (VALDX)

1641.9 MIN MN Aitken - 2/16 0044 - Poor, with CID from this MEDFER. (VALDX)

MIDNIGHT TO 0800 HOURS ELT

560 KFSO CA San Francisco - 2/1 0058 - With CL ID and talk show. Weak with KLZ phased. New. (CB-CO)

- 770 CHQR AB Calgary 1/25 0504 With CBC News, Canadian weather, ID as Sunshine Radio, another ID at 0525 as Calgary's Information Radio, CHQR, 770. Mixing with KKOB. (CB-CO)
- 1000 KSTA TX Coleman 1/19 0706 In briefly with CL ID and into talk show. New. (CB-CO)
 - CKBWt NS Bridgewater 2/2 0702 Weak, with deep fades. Mention of CBC Radio at 0717, This is CBC Radio heard clearly at 0719. Mixing with a very poor WMVP. I heard this guy about a year-and-a-half ago with a positive CL ID, but it was a couple of hours earlier in the morning. The only other Canadian listed on 1000 kHz is CFLP, which is listed as FF. (CB-CO)
- 1180 KYET AZ Williams 1/30 0927 Sign-on, then SSB. *The News Station*. Heard later at 0935 with weather, school lunch menu, headlines at 0938 (Navajo horses die of botulism). Very good signal. (JW-CO)
 - WLDS IL Jacksonville 2/2 0749 With CL ID, several mentions of the Chicago area, EZL music. New. (CB-CO)
- 1200 KYOO MO Bolivar 1/29 1017 Ads, local weather, call ID, more ads. Fair-to-poor, with KFNW nulled and KBCO-1190 slop. Logged on Superadio II while still in bed, two hours past Missouri sunrise! Would not expect this from a 1000-watt station, but will take it for Missouri #46. Will seriously consider "sleeping in" as a new DX technique. (JW-CO)
- 1250 KWSU WA Pullman 2/3 0007 With CL ID and into NPR News. Promo for Fresh Air program. (CB-CO)
- 1310 CIWW ON Ottawa 1/10 0110 With CL ID, several references to Ottawa, ad for a mall in Ottawa. Heard phrase Here in Ottawa. In and out of the mud. Was trying for KEZM test, looped generally east to null out local pest KFKA. No dice on the test, but I'll gladly take this in its place! New. (CB-CO)
- 1380 WPHM MI Port Huron -2/1 0732 Fair, with WPHM ID and into 70s and 80s AC music, not EZL as per Log. (SA-MB)
 - KOTA SD Rapid City-2/1 0737 Good, with ID as Dependable Radio 13-80 KOTA. Into 70s and 80s Adult Contemporary music. Not all talk as per the LOG. (SA-MB)
- 1420 KLTW AZ Sierra Vista 12/31 0001 With ID as 1420 KLTW. First time heard with new call. (CB-CO)
 - KSTN CA Stockton 1/1 0704 With ID as 1420 KSTN. Open request line, several CL IDs. New. (CB-CO)
- 1430 KCOH TX Houston 1/27 0745 Call ID with gospel music. Weak signal. New here. (JR-OK)
- 1520 KMPG CA Hollister 2/2 0859 Sign-on in SS, then Mexican music to 0911. Ad for a Watsonville nightclub. Fair, with KOMA partly nulled and XEJBC fading. (JW-CO)
- 1570 KYCR MN Golden Valley 12/19 0855 With CL ID out of the mud. Upcoming program info. New. (CB-CO)
- 1590 KLIV CA San Jose 2/3 0935 With KLIV News time (in PST), and into CNN News. CL ID again at 0952. New. (CB-CO)

0800 TO 1600 HOURS ELT

- 550 CFJC BC Kamloops 2/16 0847 Fair, with <u>Buffie Ste. Marie</u> music, and weather. Under KFYR. NEW. (VALDX) [Buffy Ste. Marie "music"? Hi Ed.]
- 610 CHNL BC Kamloops 2/16 0838 Good, with ad for Kamloops Blazers hockey. Into oldies. NEW. (VALDX)
- 630 CKOV BC Kelowna 2/16 0844 Good, with local weather and announcements, Dr.

 Laura promo, and ID as The Okanagan News Authority OV-63. NEW.

 (VALDX)
- 650 KMRZ WY Orchard Valley -2/4 1055 With ID as KMRZ, Orchard Valley and KIGN (FM)
 Cheyenne. AC format. Strong. New. (CB-CO)
- 930 KWOC MO Poplar Bluff 2/2 0822 With CL ID, C&W music: Donna Fargo C&W oldie

 The Happiest Girl In The USA. Have tried for this one for a long time! New.

 (CB-CO)
- 970 KDWG MT Billings 2/7 1004 With local ad, The Cat slogan and KCTR CLs, then C&W music. Fair in QRM. (JW-CO)
- 980 KUPI ID Ammon 2/7 1038 With Idaho Falls ads, local birthdays, This Day In History stuff, AMA Radio News. Fair in QRM. (JW-CO)

- KMBZ MO Kansas City 2/7 0900 Poor, with TC, then ABC News. VID into weather. Lost to heavy QRM and fading. (TJ-SD)
- 1000 KLOH MN Pipestone 2/4 1000 Strong, with CL ID, local PSAs (public school info), news on murder case in Boulder, Colorado, ad for marine equipment store in Pipestone. I was beginning to wonder when this regular was going to start fading down. Probably not until noon. (CB-CO)
- 1200 KYOO MO Bolivar 2/3 0904 With This is Big Country, KYOO. C&W music format. In partial WOAI null. (CB-CO)
- 1270 KTFI ID Twin Falls 12/18 1000 With ID as KTFI, Twin Falls. Historical event piece (On this day in 1719, 1969 & 1982, etc). Local gift shop ad, mention of Twin Falls, ad for outdoor equipment (ski and rock climbing gear). New. (CB-CO)
- 1350 KCKC CA San Bernardino 2/10 0914 With traffic report, call ID. Fair under KGHF. (IW-CO)
- 1380 KCNW KS Fairway 1/27 0800 News weather, religious talk. (JR-OK)
 - WFCL WI Clintonville 2/2 1830 Good, with local ads and adult standards music. Not "all talk" as per log. (SA-MB)
- 1440 KDIZ MN Golden Valley 2/3 0931 With program notes; call letters mentioned a couple of times, then back to *Radio Disney* programming. Fair-to-poor in KRDZ/KMAJ QRM. Ex: KQRS. ([W-CO)
- 1480 KPHX AZ Phoenix 2/3 0800 With ID in EE as This is KPHX, 1480 AM, Phoenix and into SS programming. Fair-to-good on peaks. (CB-CO)
- 1500 KABR NM Alamo 2/10 0901 Opening prayer, then sign-on announcement by female in accented EE. Announced power of one kilowatt, studios located on campus of Alamo ?? Community School, then into music. Fair, over KSTP. (JW-CO)
- 1520 KCGN SD Sioux Falls 2/2 1003 With CL ID and REL program. In briefly with long, deep fades. In and out for a few minutes at a time. Must have taken the scenic route to get here. Finally a domestic other than KOMA on 1520!!!

 New. (CB-CO)
- 1616 KMOZ MO Rolla 2/1 0800 Spur from 1590 transmission heard well until 1000. KMOZ was not heard on 1590. Also heard the previous evening on 1610 through 1650 kHz. Programming was <u>Leeza Gibbons</u> top hits show with ads for Rolla businesses. I had not heard KMOZ previous to this. (JR-OK)

1600 TO 2400 HOURS ELT

- 610 KILT TX Houston 2/9 1859 Legal ID by female in heavy QRM. Very rough, but enough for a new one, making it Texas #134. (JW-CO)
- 740 KBOE IA Oskaloosa 2/15 1935 Very strong, with lots of local ads for William Penn College, into basketball game. Sounded way too strong for 229 Watts. (VALDX)
- 790 KURM AR Rogers 1/26 1944 With KURM ID and Sports Radio 790, KURM at 1945.

 Local highway construction advisory followed by Bulldog basketball game preview. Strong. (CB-CO)
 - KSPD ID Boise 1/21 1959 With KSPD, Boise and into EZL music. Fair on peaks. New. (CB-CO)
- 820 CHAM ON Hamilton 1/2 2054 With REL program followed by This is 820 Cham. Good. (CB-CO)
- 850 KWOF IA Waterloo 2/15 1820 Poor, with REL programming and a lady IDing as KWOF, Your Friendship Station. Under WAIT. NEW. Station # 2000 for Me!!!!! (VALDX)
- 970 KBVR? MT Billings 1/29 1903 With CL ID as KBVR(?) and slogan Cat Country. Had them as KDWG with same slogan, but don't recall seeing a call change for what I presume is the C&W station in Billings on 970. Looped in NW direction. New call? (CB-CO)
 - WDAY ND Fargo 1/29 1859 With This is WDAY, Fargo-Morehead with PSA (students to develop), mention of WDAY Air Touch Cellular Network. Good signal. (CB-CO)
- 1140 KZMQ WY Greybull 1/23 1834 You've got the best of the West Country Superstation KZMQ, then C&W music. Good signal. (JW-CO)
- 1180 KYET AZ Williams 12/18 1843 With ID as Right here on KYET. REL news and programming. In briefly, then lost to KOIL. New. (CB-CO)
- 1210 WDAO OH Dayton 2/15 1728 Fair, with Urban Contemporary music and WDAO IDs. (VALDX)

- 1220 CJRB MB Boissevain 1/2 2125 With ID as CJRB, Boissevain. REL program on current differences between Christian and Islam practices. Mixing with CIOC. New. (CB-CO2)
- 1230 KISD AZ Phoenix 1/2 2007 Out of the mud with CL ID and REL program.
 (CB-CO2)
- 1250 KHIL AZ Willcox 1/30 1900 Area news, program note for Willcox Cowboys basketball broadcast on *Power 98.3 FM.* Good signal. (IW-CO)
 - KEZQ AR Little Rock -2/9 2045 NOS music, then female with call ID, then into an Ed Ames tune. Poor in QRM. Ex: KURB here. (JW-CO)
 - KIKZ TX Seminole 2/9 2103 Mexican music, call ID in SS. Mentioned phone number as 758-5878/9. Fair, with not much N-S QRM. Don't know if total format change or just a Sunday night SS program, as many stations have. (IW-CO)
- 1270 CHAT AB Medicine Hat 1/2 1822 With ID as new Country, 12-7 CHAT. Local temperature at 3 degrees. TC, PSAs, C&W format. New. (CB-CO2)
 - CHAT AB Medicine Hat 2/1 2044 Pregame show, then play-by-play at 2050 of Medicine Hat Tigers vs Prince Albert Raiders hockey game. Fair in QRM. (IW-CO)
- 1280 KDYL UT Salt Lake City 1/2 2142 With CL ID, NOS format. Under KRRF. New. (CB-CO2)
- 1330 WVHI? IN Evansville 1/25 1/25 2059 During a KFH pause, heard ... SO Evansville.

 Not much to go on, but the "Evansville" was clear. Would be a new one.

 (JW-CO)
 - WMNN MN Minneapolis 1/25 2114 ... WMNN ... never more than ten minutes away ...

 News Radio 1330, then female announcer with sports update. Briefly fair in ORM. Their night pattern is NNW and not common here. (JW-CO)
- 1430 KBIL TX Breckenridge 1/28 2145 Oldies with call ID. New here. (JR-OK)
- 1500 WAKE IN Valparaiso 2/15 1730 Clear ID in a fade up under WILY. Not heard in years. (VALDX)
 - WOLY MI Battle Creek 2/15 1725 -Fair, with light rock music and a clear WOLY ID.

 No sign of KSTP for about 15 minutes. NEW. (VALDX)
- 1530 KFBK CA Sacramento 1/28 2145 Strong with deep fades. News and call ID.
- 1580 KFDF AR Van Buren 1/28 1951 Presumed, with girls basketball, <u>Van Buren</u> vs Russellville, Van Buren and Fort Smith ads. Fair-to-poor in QRM. (JW-CO)
 - KOKB OK Blackwell 1/28 2024 With high school basketball game, Blackwell vs ????.

 Call ID and ads at 2024. Fair-to-poor in QRM. (JW-CO)

GRAVEYARD DX UPDATE

* indicates North American record-holder

1340 kHz:

CFYK NWT

Yellowknife

Esa Hänninen Morris Sorensen Lemmenjoki

3163 8 *898

God's Lake Narrows, MB

DDXD-East

Deadlines are Tuesday.

Looks like a lot of silent stations trying to beat the FCC deadline by coming on the air, even with bad transmitters and antennae systems ...

Welcome back to Robin Christoff, with the first report in nearly three years from out Welland way ... and a report well worth waiting for, I might add. Hope to hear from you lots more, Robin!

STATION NEWS

- 650 WRPT MA Ashland 2/17 1400 Talk America radio network multiple station IDs, then "World Web News Network" UPI news. (BC-NH)
- 930 WPAT NJ Paterson Their new address is 1396 Broad St., Clifton NJ 07013, phone (201) 777-9393. Now broadcasting in Korean 0000-1800 and Spanish 1800-2400. (JH-NJ)
- 1030 WNTL MD Indian Head 2/8 1730+ // WINX-1600 Rockville MD and 94.3 FM
 Manassas VA; heard an ID 2/12 1100: "WNTL Indian Head is WINX."
 Oldies format. (IEK-MD)
- 1060 WJLT MA Natick 2/17 1500 "Piercing the darkness, J-Light 1060 in stereo, WJLT Natick-Worcester-Boston" and contemporary Christian music. (BC-NH)

- + Back on the air with religious programming, "This is WJLT 1060 Natick-Worcester-Boston." (BF-MA)
- 1120 WKCE TN Maryville 2/8 Returned to the air on this date (wonder why?) with distorted audio, no talk, and GOS albums tracked in their entirety. Had been off since 1993. (SF-TN)
- 1160 WPVG? MD Funkstown 2/8 1057+ Silent station noted on the air // WARX-FM in Hagerstown. Only "Oldies 106.9" type slogans, no legal ID at 1100. Unlike the 1030 operation, was not noted 2/10+. Testing? Thought I remember reading in DXN some time ago the WPVG towers had been dismantled. (JEK-MD)
- 1170 WBRW NJ Bridgewater 2/16 1030 News, ID, sounded like regular schedule, so another one which planned to beat the February "death sentence" has resurfaced. As would be expected from their temporary power, antenna arrangements, signal was rather poor. (RJE-PA)
- 1200 WKOX MA Framingham 2/17 1300 ID in English, then "Esta es Radio Latina, mil dos cientos AM, Radio Latina la nuestra la emisora de 97" and news in Spanish. (BC-NH)
- 1270 WXYT MI Detroit 2/3 Adds "Imus in the Morning," which had been on crosstown WYST-97.1, per Radio and Records 2/7. (DP-HI)
- 1280 WADO NY New York Now located in the same building as WPAT-930; using the same address and phone number as WPAT above. (JH-NI)
- 1290 WATO TN Oak Ridge 2/15 Adds "Coast to Coast AM with Art Bell" per show today. (DP-HI)
- 1590 WERA NJ Plainfield Now in Spanish 1600-1900 Saturdays and Sundays only. I inquired about WWRL-1600 buying them and taking them off the air (see AM Switch in no. 3), and they said they're still in the talking stage. (JH-NJ)

DX TESTS

- 640 WBOW IN Terre Haute 2/16 0030-0100 Not heard, Cuban very strong this morning.

 (RA-MA) Heard for the full 30 minutes, but very weak at times. Many, many, many code IDs and lots of trumpet music by Herb Alpert and the Tijuana Brass. (IL-OH)
 - WHLO OH Akron 2/10 0100-0130 Heard fair mixing with WNNZ, WFNC, Cuban, with code IDs, voice IDs, varying tones, some music ... a good test. (RA-MA) Heard at mostly good level pvr WGST with EZL music, polkas, voice IDs, code IDs, test tones, and pulse tones. (SF-TN)
- 1070 KHMO MO Hannibal 2/17 0100-0130 Heard weak under CBA, CHOK with 4 sets of code IDs noted, nothing else, no voice or music. (RA-MA) Heard poor-nil in CBA, CHOK null with "KHMO" (-.- -- ---) in code noted under CHOK's oldies at 0108, 0121, and 0126. (MB-ON)
- 1450 WILM DE Wilmington 1/26 Prompt non-QSL says my tentative unID faint code at 0131 and 0159 wasn't WILM. I wasn't imagining what I heard. Did anyone else note this? (AR-ON) [CHUC?- DY]
- 1570 WYTI VA Rocky Mount 2/1 0000-0030 Heard poor over nothing in particular with "WYTI" (--- -.- -.) code IDs noted 0003 and 0016. (MB-ON) Heard with code changing in pitch every two minutes. Best during first half of test. Also heard voice IDs at 0021 and 0026 mentioning city of Rocky Mount, operating frequency and power output for day, night. (RKC-ON)
- 1600 KATZ MO St. Louix 2/3 0200-0230 Heard poor with tones heard under dominant pest WWRL's urban/soul music. No voice, code IDs noted. Unneeded. (MB-ON)

UNID and UNID HELP

- 1080 UNID — 2/15 1822 One on One Sports poking through, occasionally readable in WTIC null. KRLD? (DY-NY)
- 1470 UNID - 2/11 0640 SS heard under WKAP, again same time on 2/13. (RJE-PA) [WMMW. DY]

WNBH 1340 AM • WCTK 98.1 FM

P.O. Box 3201, New Bedford, MA 02741

LOGGINGS: 0000-0800

- 630 CFCY

 PI Charlottetown 2/1 0120-0125 Song "Feed Jake" by Pirates of the Mississippi, promo "proud to be part of your community." Over WPRO, no sign of CHLT. The C&W music caught my ear, as I had never heard it on this frequency before. Coming in strong, and CHTN-720 like a local at the time. (BF-MA)
- 930 CFBC NB St. John 1/27 0608 Weak under WBEN, oldies into "it's 7:08 on Oldies 93, CFBC," then clobbered by WBEN ad. A rarity here. (RKC-ON)
- 1300 WAVZ CT New Haven 2/12 0009 Song "No Not Much" by The Four Lads into ID "WAVZ AM 1300," into more NOS (Benny Goodman tune), fair over WJFK and WERE. (RKC-ON)
 - WMTN TN Morristown 2/12 0045 AC music from 0010 overpowering WJFK and weaker WERE, but no ID given until finally at 0045 "WMTN 1300 AM, Morristown, your talk-news station," into announcement "And this is WMTN Morristown, on the air for equipment checks at 12:45." Station gone after this. (RKC-ON)
- 1370 WVAX IL Lincoln 2/5 0705 Up briefly above mix with "WVAX news time is 5 after 6:00. Good morning, it's 29° in (land of?) Lincoln." then fade, (RKC-ON)
 - WHEE VA Martinsville 2/5 0706 Weak under WSPD with "Good morning ... it's time now for a look ... WHEE news," lost completely to WSPD. (RKC-ON)
- 1420 WLIS CT Old Saybrook 2/11 0655 ID, weather, surprisingly strong over WCOJ. (RIE-PA)
 - WLNA NY Peekskill 2/7 0650 Strong with PSA of some sort mentioning Peekskill and WLNA, into traffic update and "Good morning, Hudson Valley, I'm ... WLNA, it's 6:52 at WLNA." Soon lost to WHK and usual daytimer WACK. (RKC-ON)
 - WWSR VT St. Albans 2/7 0640 Up over WHK briefly but clear ID: "AM 14-20 WWSR, we are your radio(?) station ..." (RKC-ON)
- 1570 WBUX

 PA Doylestown 2/4 0730-0800 Noted on the air with AP news, mentions that

 "this is a temporary broadcast" and they would go to all-news format starting
 in April. Numerous IDs as "WBUX 1570" and "The News Station," fair.

 (IH-NI)
- 1580 WSRF FL Fort Lauderdale 2/1 200-0205 Under CBJ but very clearly // WINZ-940.
 Only fifth station heard from FL." (BF-MA)
- 1600 WMHG MI Muskegon 2/3 0221 Surfaced over WWRL and the KATZ DX test with ID as "Giving you more of what you're looking for, 1600 WMHG." Heard as WTRU in 1978. (MB-ON)

LOGGINGS: 0800-1600

- 600 WKLW KY Paintsville 2/7 0801 Fair in WMT null with Elvis' "Viva Las Vegas," ID as "WKLW Paintsville," news. (MB-IN)
- 1280 WJPY

 DE Seaford 1/29 1558 Up nicely with GOS/UC music into "WJDY Salisbury and (or AM?) 1280 WJPY Seaford..." Fade, then back up with GOS briefly before lost to WKST, CFYZ, and WHVR mix. (RKC-ON)
- WI Sparta 2/10 1548-1558 Assumed station (no formal ID heard) with CNN Headline news, into local news break mentioning missing snowmobiler in Sawyer County, talk of gasoline prices with the Wisconsin AAA, and finally a weak "K 12-90 radio" ID, then back to CNN news. Next break at 1558, heard mention of Monroe County and to find out what's going on in Sparta, "tune into Monroe County Perspective on K-12-90," into ads. (RKC-ON)

LOGGINGS: 1600-2400

- 680 WXKN KY Newburg 2/11 2300 The Jim Bohannon show, ID, weather forecast, mention of Kentucky, CNN Radio. (WM-MD)
- 830 WKTX OH Cortland 2/8 1745-1800 Religious format, legal ID to sign-off at 1800 with SSB, fair, new. (JH-NJ)
- 840 WKDI MD Denton 2/12 1615-1630 Black preacher, promo for local church events, "The Ministry Station," ID at 1630. (WM-MD)
- 850 WYLF

 NY Penn Yan 2/8 1845-1905 NOS, IDs as "Music you remember" and at 1900

 "AM 850 WYLF Penn Yan ? Geneva," into ABC news. Way over WRBZ
 most of the time, new. (JH-NJ)
- 1250 WTMA SC Charleston 1/28 1700 "This is the number one talk radio station of South Carolina," into singing ID "WTMA, Charleston," another ID "Talk radio 12-50

Rochester, NY 14607-3832

11

DE Wilmington - 2/10 1720 - Assumed with ad for Duvonice? (Tavares?) 1290 WJBR chocolates in Wilmington. Mentioned locations of 800 Market St. in downtown Wilmington and in Tallevville on Concord Pike. Checks out on map. (RKC-ON) [Call IDs are infrequent on this one. - DY]

Foreign DX Catches. Times are UTC; for ELT, subtract 5 brs.

- WCHY GA Savannah 2/10 1747 C&W, into "Real Country music keeps you rolling home, 24 hours a day, AM 12-90 WCHY," back to C&W. (RKC-ON)
- 1310 WDOC KY Prestonburg 1/30 1725 Up through mess, female announcer giving weather forecast into "... you're listening to WDOC, Hot Country 13-10," into C&W. (RKC-ON)
 - WTIK NC Durham 1/30 1800 REL program into "Celebrating 58 years of radio, AM 13-10 WTIK Durham-Raleigh-Chapel Hill, the Christian talk of the Triangle," excellent above mix. (RKC-ON)
 - WDOD TN Chattanooga 1/30 1730 "Southeast Tennessee's easy listening AM 13-10 WDOD ... armed(?) for company," into Barry Manilow's "Mandy." (RKC-ON)
- 1390 WEED NC Rocky Mount 2/11 1821 Up through mix and pest WDCW with "This is WEED ..." into ad for Q&S Oil Company "10 minutes from (??) 301 South of Rocky Mount at the (??) Street line," gave phone number of 446-2971 and again mentioned Route 301 South, (RKC-ON)
- 1420 WVIS KY Owensboro 2/6 1734 AP network news into "From WVJS news, I'm Jim Hall," faded quickly but back up at 1754 with "Here is the weather from ... WJVS," into weather, then another WJVS ID. (RKC-ON)
 - WKCW VA Warrenton 2/6 1721 "... WKCW, it's 5:21. Tom Casey on your home drive with you this afternoon," into PSA and "WKCW cares about Faugier County" (pronounced faux-key-air). (RKC-ON)
- 1480 WABB AL Mobile 2/10 2200 ID, mention of Mobile, NBC hourly news heard. (WM-MD)
- 1540 WOGR NC Charlotte 2/12 1800 Ending syndicated REL program, ID, brief music, starting new syndicated program, then power, pattern change. Major signal drop, but still readable afterwards. I must have passed this a dozen times before, thinking it was either WDCD or WREJ. (RJE-PA)
 - WTXY NC Whiteville 2/12 1800 With complete sign-off announcement over, under WOGR after the latter's power and pattern change. (RJE-PA)
- 1570 WTLK NC Taylorsville 1/31 2304 Giving weather forecast (cloudy, high mid 50's, low mid 30's), then "... WTLK weather center. Have yourself a good evening, we're glad to have you with us," into C&W. Good over rest of mess on frequency. (RKC-ON)
 - WSWV VA Pennington Gap 1/31 2207 ID "WSWV AM and FM, continuous soft hits." Another ID at 2224 with "WSWV, the twin W" and weather for Pennington Gap. Lots of FM 105.5 IDs heard later as station became dominant through time of WYTI test. Usual WANR, WPTW, WOTW, WBUG et al very quiet tonight. (RKC-ON)
 - WKBH WI Holman 1/31 2147 WHile checking out frequency before WYTI DX test, station came up nicely (but briefly) in mess with "You're on the ticket, AM 15-70 WKBH," heard mentions of Holman and Onaloska in ad that followed. (RKC-ON)

REPORTERS Acushnet MA . DRA SWR Loops & IW

KA-MA	Kay Arruda	Acustinet MA - RoA, 5006, Loops, & Lvv
MB-ON	Mike Brooker	Toronto ON - RF-2200, RFB-45
MB-IN	Mark Burns	Terre Haute IN - R8, 80' LW, Kiwa loop
RKC-ON	Robin Christoff	Welland ON - R8A, Kiwa loop, 100' LW, MFJ-956 tuner
BC-NH	Bruce Conti	Nashua NH - Local news
RJE-PA	Russ Edmunds	Blue Bell PA - Nissan auto radio, whip
BF-MA	Bill Fortier	Worcester MA - Superadio barefoot
SF-TN	Steve Francis	Alcoa TN - TRF
JH-NJ	John Hanz	Old Bridge NJ - Realistic 12-650A
JEK-MD	Joe Kureth	Uniontown MD - DX-375, Superadio III, LW
JL-OH	Jim Leder	Cincinnati OH -
WM-MD	William McGuire	Cheverly MD - DX-380
DP-HI	Dale Park	Honolulu HI - Station news 1580
AR-ON	Andy Rugg	Cornwall ON - HQ180, Radio West loop
DY-NY	David Yocis	South Nyack NY - Icom R71A, Kiwa loop

I'm a little discouraged by conditions with little evidence of TA's and no CA/SA openings of note. I just got my 1996 IRCA Mexican Log, but it's only going to gather dust if I don't hear DX! I've actually been spending more time on shortwave. This is not the capitulation that it seems, because it eventually always pays to be on top of shortwaye stuff for IDing medium wave DX. Right now I'm listening to a great music program on Zambia 4910 kHz, and the announcer just gave an ID in

English! JIM

TRANS-ATLANTIC DX

- 153 ALGERIA ENRS Bechar, FEB 16 0010 Poor to fair signals with AA chanting. Best LW signal. [DX-MB]
- 162 FRANCE RFI Allouis, FEB 16 0005 Poor signal with music program [DX-MB]
- ENGLAND BBC Droitwich, FEB 16 0015 Very poor signals with bits of talk. [DX-MB]
- ALGERIA Les Trembles FEB 9 0300 Good; time pips, woman in Arabic, then string music, over unID Koranic chants. [Conti-NH]
- WESTERN SAHARA, A network, Laayoune FEB 9 0120 Fair; Arabic music // 207.
- SENEGAL, RTS Dakar FEB 16 0750 Dissertation in French, distorted audio, briefly huge signal, faded away before 0800, [Conti-NH]
- MOROCCO, A network, Rabat FEB 9 0025 Fair; talk in Arabic and music // 207, over Koranic chants assumed to be from Egypt. [Conti-NH]
- ITALY RAI Radiouno, Trieste, FEB 9 2051-2142 Pop music, usually alternating an oldie in English and an Italian song, with few (Italian) announcements, one "Radiouno" noted but unequivocal parallels with 1332 and 6060; SIO 222 mostly beneath the two AA stations [Burnell-NF].
- ALGERIA Alger FEB 9 0350 Fair; Arabic music // 549. [Conti-NH]
- SPAIN R.Intercontinental, Madrid FEB 9 0405 Fair; techno pop/disco music including Fugees "Killing Me Softly". [Conti-NH]
- 1044 SPAIN, SER synchros, FEB 9 0510 Fair; telephone talk // 1008. [Conti-NH]
- 1053 MOROCCO, A network, Tanger FEB 9 0520 Good; Arabic music // 612. [Conti-NH]
- 1521 SAUDI ARABIA BSKSA Duba, FEB 8 2228-2300 At good level with AA vocal music and man in AA // 9870 and 9555 until sign-off at 2300. No problem from domestics on 1520, normally loud WWKB seemed to be off at the time. [DeLorenzo-MA]
- 1611 VATICAN CITY R. Vaticana, FEB 9 0535-0610 Poor to fair with man in II (?) and frequent IS between items. Signal peaked 0604-0610 and then faded, probably because of sunrise at transmitter. [DeLorenzo-MA]

PAN-AMERICAN DX

- 530 TURKS AND CAICOS IS RVCI, FEB 16 0050 Good to strong dominating the frequency with Spanish religious talk. [DX-MB]
- COLOMBIA R. Auténtica, Cali FEB 9 0140 Tentative; preaching in Spanish, brief strong fade-ins, otherwise well under WFAN-New York. [Conti-NH]
- DOMINICAN REPUBLIC R.Dial, San Pedro de Macoris FEB 16 0715 Good; "24! 24! 24 horas en el aire, Radio Dial!" and romantic ballads. [Conti-NH]
- CUBA R.Progreso FEB 16 0620 Good; "... programa ritmo, Radio Progreso" and salsa music. [Conti-NH]
- CUBA R.Reloi FEB 16 0625 Poor; weak audio but RR code IDs heard clearly through the din with WJR-Detroit nulled. [Conti-NH]
- COLOMBIA HIJX Bogotá, FEB 16 0035 Poor to fair signals with talk about Colombia. [DX-MB]
- VENEZUELA R.Coro, Coro FEB 16 0655 Good; jingle with UTC-4 time check, salsa and folk music. [Conti-NH]
- unID, FEB 16 0810 Fair; religion in Portuguese and inspirational music, TWR-Netherlands Antillies and WCCM-Lawrence are likely candidates. [Conti-NH]
- COLOMBIA, CARACOL Bogotá FEB 16 0815 Good; telephone talk, mention of network stations in Argentina, Miami, and New York. [Conti-NH]
- MEXICO, XEQ Mexico FEB 9 0455 Good; end of Mexican fútbol game, America vs. Puebla, then classic rock hits by Janis Joplin, SRV, Allman Bros. [Conti-NH]

1010 CUBA R Reloi (site?), FEB 20 0345-0359 - Fair-poor under weak local WQYK and XEHL, usual time sounders and man with news. New frequency. [Krueger-FL]

1020 TURKS AND CAICOS IS CCR, FEB 16 0055 - Booming in making KDKA almost uncopiable with Super Power 1020 Caribbean Christian radio ID. [DX-MB]

1610 ANGUILLA CARIBBEAN BEACON The Valley, FEB 16 0110 - Poor signals in a mess of TIS's with gospel music program. [DX-MB]

1680 UNID, FEB 16 0400 and 1205 - Both times in Spanish. 0400 had two men doing a play-byplay of a game while the 1215 was a man and a woman doing a music program. [DX-MB] 1685 COLOMBIA MER, Mercaderes, FEB 16 0029 - Fair with beacon signing MER then a space

and E. [DX-MB]

TRANS-PACIFIC DX

702 AUSTRALIA 2BL Sydney, FEB 16 1312 - Poor signals with music program. [DX-MB]

1206 UNID, FEB 16 1322 - Very poor with bits of music [DX-MB]

1638 AUSTRALIA Lebanon Radio Australia, Sydney, FEB 16 1330 - Very poor with Arabic music. [DX-MB]

STATION NEWS

UNITED KINGDOM: ON FEB 11 Great Yorkshire Gold ceased broadcasting. The last record played was Roy Orbison's "It's over", played by Al Dupres, who was the voice that launched the station as Viking Gold. The station, broadcast in Bradford, Sheffield and Hull in various guises since 1989, has been closed to make way for a new station, launching at 8am tomorrow morning, called The Big Easy: Magic AM. Magic will play non-stop easy favourites, with less commercials, for today's thirtysomethings. Magic 828 in Leeds, Magic AM in Sheffield, and Magic 1161 in Hull are three seperate stations. [James Cridland, Magic AM webmaster]

USA: 670 WWFE, Miami (presumed), 0320-0340/0359-0401 on FEB 20. Tune-in to Brazilian PP male evangelist nonstop, mostly fair under R. Rebelde. 0334-0338 ads, one with reference to "Hialeah". Presumably WWFÉ (WRHC's sister SP station). Brief recheck 0359-0401 with definite SS man, no clear ID pulled. Portuguese was an odd one to stumble upon,

presumably running non-SS blocks (this was a local Wednesday). [Krueger-FL]

CONTRIBUTORS

@Shawn Axelrod and Wayne McRae, DXing from Valhalla Beach MB: 2 - ICOM ICR-70 with PLAM board and filter mods, 8 beverages going south west and east (600-2200 feet) [saxelrod@mb.sympatico.ca]

@Jean Burnell, St. John's NF; Drake R8A, 1-meter loop (jburnell@plato.ucs.mun.ca)

@Bruce Conti, Nashua, NH; Lowe HF-225 Europa, MWDX-5, 30-m south sloper, 30-m noise-reduced east sloper. [baconti@aol.com] [bc@lexicon.com]

Marc DeLorenzo, Auburnda MA; JRC NRD-525, Quantum Loop.

@Terry L. Krueger, Clearwater FL; NRD-535, HO-180A, Grundig YB-400, ICF-2002, Scotka Loop, 2 x dipoles [via Tocobaga DA #21] [tocobagadx@earthlink.net]

NRC IDXD 64-20 "DX Files" supplement

DX FILES: IRN LIST

From: paulorm@es.co.nz (Paul Ormandy)

Attn Gray-Liners:

I have been e-mailing Gene "Geno" Davis Christianson, Operations Director for the Interstate Radio Network and as requested, he has sent me a list of current IRN stations:

LRH 200 RADIO CHAJARI

VIDEO CABLE VISION - CANAL 4 - TY COLOR

WKTY LaCrosse WI

590 WIMS Ironwood MI

KSJB Jamestown ND 600

WSM Nashville TN*

660 KTNN Window Rock AZ*

WFMW Madisonville KY

KKOW Pittsburgh KS* 860

1170 WWVA Wheeling WV

1210 KGYN Guymon OK*

1240 WLAG Roanoke AL

1400 WRDB Reedsburg WI

1600 KYGO Denver CO

The stations marked with an * are regularly heard here in New Zealand.

DX FILES: NEW 1680 TIS STATION

Greetings DX friends, Last night (2/20) from 2251-2300 EST, I heard a new TIS on 1680 in Texas. A man repeated the following announcement on a tape loop every one minutes, ten seconds: Dallas-Fort Worth International Airport, this is WQO767, 1680-AM." It was also in at 0750 on 2/21. Judging from the strength of the signal, I would say the power exceeds the low wattage we usually find for TIS stations, which I believe is around 10 watts, 73, Larry Godwin, Missoula, Montana

Broadcaster's hopes rise with tower

Station aims to go on air by Feb. 8 Newark Star-Ledger in Somerville -via leff Ross

By Eleanor Barrett

It won't be part of Somerville's downtown revitalization scheme, but WBRW radio will be back on the air on Feb. 8.

Branchburg residents Dan and Sarah Lohse watched a crane operator erect the AM station's 135-foot tower on a muddy Bridgewater lot

In October, Lohse received approval from Bridgewater to build the radio tower in the Finderne section on part of a 37-acre lot owned by entrepreneur Joe Horner.

A month earlier, he had stood somewhat rejuctantly before Somerville's governing body as part of a tower builder's scheme to erect a 250-foot tower on a 3-acre tract of va-

That plan was not what the professional radio engineer had in mind when he began to make inquiries to Somerville in 1993, soon after he and his partner, John Carriciolo, purchased the license and assets of the defunct AM station.

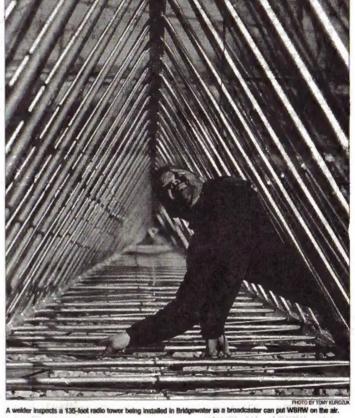
Originally, the tower was to be used exclusively by WBRW, a daytime-only radio station that had broadcast on the Bridgewater/ Somerville border for 20 years before financial problems forced it to sign off in 1990

Along with the new sidewalk pavers and wrought iron planters, Somerville business leaders hoped radio station WBRW might have lent the county seat an added flair as it broadcast live from a storefront studio along Main Street.

With Lohse's proposal stalled, tower builder Network Management Inc., based in Doviestown, Pa., came into the picture, with a deal connected to Somerset County's effort to win approval of a tower for its emergency communications system on the Second Watchung Ridge in

At a September council meeting, Borough Attorney Phillips Heathcote Jr. questioned that plan, and the Somerville council voted to pay a consultant \$3,000 to investigate the best use of the land. The report has yet to be submitted, Mayor David Hollod said yesterday.

Lohse soon after wrote the mayor and council announcing his withdrawal. He said he was just about to give up several days later, when Homer called to confirm that his land would be available for a



Somerville plan had a lot to do with time, he said.

We wanted to take the path ofis not as important as getting the station on the air," he said.

The hard part behind him, Lohse an FCC deadline set last year, requir- years. I will do whatever I can to said.

Lohse's reason for dropping the ing him to have WBRW up and running by Feb. 8. The station will operate out of a trailer next to the tower until it moves to its permanent home fering the least resistance. Debating in a building on the site that Horner is now renovating.

"I'll feel happy when we meet the deadline. This is Dan's dream and events leading up to this day. yesterday said he is racing to meet he's worked on this for many, many

make it really work for him," said his wife, Sarah.

shot photographs of the tower-raising yesterday, and said he was confident all will fall into place. He gave a wink and a smile as Lohse recommed

Formats Tony Fitzherberg 356 Jackman Avenue

Tony Fitzherbert akfrail@sol.com Fairfield, CT 06430-1728

Changes in programming status; reported by listeners

Locally, John Hanz writes that WADO-1280, New York City, has gone to an all Spanish talk format. He also notes that WILK-1310, Asbury Park, NI, has been scooped up by the New Jersey Nassau Broadcasting Partners, who have purchased 14 other Garden State AM and FM stations. WILK is now WADB, and has dropped its country music format for adult standards. Other Nassau AM stations are WOBM-1160, Toms River, now news and oldies, WVPO-840, Stroudsburg, adult contemporary, WTTM-920, Trenton, news, sports, and talk, WHWH-1350, full service news and information, and WNNI-1360, Newton, with an oldies format.

In Fairfield County, CT., WNLK-1350, Norwalk, WSTC-1400, Stamford, and WINE-940, Brookfield, are all simulcasting as "Fairfield County News Radio", with long news blocks during drive timers, talk at other times, and home shopping on Sundays! And over in New Haven County, WOUN-1220 is now on the air with the satellite-fed Music of Your Life format, ID'ing as "AM 1220, a service of Quinnipiac College". A few miles away finds WNEZ-910, New Britain airing romantic Spanish music!

Perry Crabbill of Winchester, VA writes that WWTL-700, Walkersville, MD, has dropped its religion and country music format for an all Arabic format. The programming is supplied by the Arab Network of America, headquartered in Washington, and the Metropolitan Broadcasting Corporation, in London. And WBPS-890, Dedham, MA., now formats all news in French during AM drive, as noted in the Boston Globe. The rest of the broadcast day is given to brokered ethnic programming and some sports talk at night.

Here is our column, from the pages of M Street Journal. Interestingly, the hottest format change is to satellite - fed sports talk.

540	WDMV	MD Pocomoke	- Country / / WBEY.
550	KUZZ	CA Bakersfield	- ABC Real Country Music / / FM.
550	KFRM	KS Salina	- Farm information and country music.
550	KTRS	MO St. Louis	- Was KSD, news and talk.
550	CHNO	ON Sudbury	- Pelmorex Oldies.
550	WJMW	PA Bloomburg	- JSN Adult Standards.
550	WPNW	RI Pawtucket	- Business news and talk.
570	WNAX	SC Yankton	 Full service and One on One Sports.
580	CKAP	ON Kapuskasing	- Pelmorex Country Music.
590	KCSJ	CO Pueblo	- Talk and Prime Sports.
590	WDIZ	FL Panama City	- ABC Adult Standards.
590	WLVA	VA Lynchburg	 WW-1 Adult Standards // WLQE-FM.
590	WROW	NY Albany	- Talk and sports.
600	CKAT	ON North Bay	- Country music.
620	WTMT	KY Louisville	- One on One Sports.
630	WDGY	MN St. Paul	- JSN Oldies.
640	WHOF	FL Wildwood	- Religion, Reach Southern Gospel.
680	KKGR	MT East Helena	- Classic country.
700	WGZS	AL Dothan	- Willis Black Gospel.
730	KBSU	ID Boise	- Jazz and Spanisĥ variety.
750	KFQD	AK Anchorage	- AP News and talk.
750	KBNN	MO Lebanon	- BNN Business.
800	WJAT	GA Swainsboro	- Country music / / FM, "U-92".
810	WCTA	TN Alamo	- Country music.
820	WGGM	VA Chester	- Contemporary Christian.
860	KMVP	AZ Phoenix	- Adult standards // KKLT, but sports format
			planned to debut in the spring.
860	KARS	NM Belen	- New Mexican artists. (Are these new artists
			from Mexico, or residents of New MexicoTF).
880	KTMT	OR Phoenix	- Sports with three sports networks.
900	WMOP	FL Ocala	- One on One Sports.
900	WIAM	NC Williamstown	- BBN Religion.
910	WEPG	TN South Pittsburg	- Oldies.
910	KXEB	TX Sherman	- All Beatles / / KTCY.
920	WPTX	MD Lexington Park	- All talk.

			15
920	WNMI	OH Columbus	- WW-I Adult Standards.
930	WYUS	DE Milford	- Tejano.
	WMGR		- ABC Adult Standards.
	WAUR	IL Sandwich	- CSN Children's programming.
	KDET	TX Center	- ABC Real Country Music.
940	KFRE	CA Fresno	- Talk "Hot Talk".
940	KXTX	IA Des Moines NC Burnsville FL Jacksonville	- Talk.
940	WKYK	NC Burnsville	- WW-I Country Music.
970	WVOJ	FL Jacksonville	- Sports and talk.
970	WZAN	ME Portland	- All talk, four networks.
980	KEYQ	CA Fresno	- Spanish religion / / KMRO.
			- Christian talk.
980	WNBI	MN Richford WI Park Falls	- ABC Oldies.
	WCMF		- Rock // FM, the station will be donated to St.
,,,	******		John's Fisher College.
990	KRKT	OP Albany	- Classic country.
		OR Albany	
	KWFT	TX Wichita Falls	- MGS Contemporary Christian.
	WMOX	MS Meridian	- Talk and Prime Sports.
1040	WMTX	FL Pinellas Park	- FAN Sports "Score".
1050	WWGP	NC Sanford	- ABC Country Music.
1070	WHYZ	SC San Souci	- ABC Urban Adult Contemporary.
1070	WTSO	WI Madison	- WW-I Adult Standards.
1080	WSSI	MS Carthage	- Prime Sports.
	WHLI	NY Hempstead	- JSN Adult Standards.
	WCLW	NC Eden	- WW-I Adult Standards.
	KTMR	TX Edna	- Spanish contemporary Christian // KTNR.
	KDEF	NM Albuquerque	- All sports.
	WXRP	AL Hanceville	- Classic country music.
	WKFL	FL Bushnell	- Prime Sports.
	WOWO		- All news and talk.
1190	WHMT	TN Humboldt	- One on One Sports.
1190	KOOO	TX Dallas	- All talk.
1190	WHYS	VA Bluefoeld	- Prime Sports.
1190	WMAD	WI Sun Prairie	- Religion.
	WKOX	MA Framingham	- News, and talk during drive times, Creole and
			Spanish from 9:00am to 5:00pm and weekends.
1210	KONY	UT Washington	- ABC Oldies.
	WGGG	FL Gainesville	
			- Sports // WMOP.
	WKIM	GA Augusta	- ABC Urban Gold.
	WCBT	NC Roanoke Rapids	- Prime Sports.
	WCWA	OH Toledo	- Adult standards.
1240	WEBJ	AL Brewton	- Oldies.
1240	KASO	LA Minden	- Adult contemporary // FM.
1240	KANE	LA New Iberia	- WW-I Oldies.
1240	KRAL	WY Rawlins	- JSN Country Music / / FM.
1250	KBSZ	AZ Wickenburg	- WW-I Oldies.
	WDAE	FL Tampa	- Sports "Sports Animal".
	KGDD	TX Paris	- Prime Sports.
	WIBV	IL Belleville	- All talk.
	KXBX	CA Lake Port	- ABC Adult Standards.
	WNOG		
		FL Naples	- News and talk.
	WWCA	IN Gary	- Back on the air with black gospel.
	WGTX	FL De Funiak Springs	- Talk.
	KAZA	CA Gilroy	- Spanish oldies.
1290	WCCC	CT Hartford	- Rock / / FM.
1290	CJBK	ON London	- Oldies, talk, sports.
1310	KBOK	AR Malvern	- Classic country music.
	KDIA	CA Oakland	- R and B oldies.
	KFSB	MO Joplin	- Sky Contemporary Christian.
	KNOX	ND Grand Forks	- News, talk, agricultural information.
	WXMC	NJ Parsippany	- Spanish contemporary.
	WDKD	SC Kingstree	- ABC Real Country Music.
	WTKZ	PA Allentown	
1320	MINZ	IA Allemown	- Sports from three networks, "Sports 1320".

16		
1320 KGDC	WA Walla Walla	- Religion.
1330 KENU	WA Enumclaw	- Alternative // KGRG.
1340 KCBL	CA Fresno	- All sports, four networks.
1340 WDSR	FL Lake City	- Prime Sports.
1340 WNBH		- ABC Real Country.
1340 KTSN	NV Elko	- Talk and sports.
1340 KKAM	TX Lubbock	- Sports.
1360 KBUY		- WW-I Adult Standards.
1370 KKSJ	CA San Jose	- ABC Adult Standards.
1370 WAXE 1370 WABD	FL Vero Beach	- Bloomburg News.
		- One on One Sports.
1380 KRNN	AR North Little Rock	- AP News.
1380 WKBQ	MO St. Louis	- Country music / / WKKK. - WW-I Oldies.
1380 WABH	NY Bath	
1380 KQKD	SD Redford	- Country music / / KGIM.
1390 KAMO 1390 KCRC	AR Rogers OK Enid	- Talk, regional Mexican. - Talk.
1390 KCKC	DA Planahura	- JSN Oldies.
1390 WJMW		- Reach Southern Gospel.
1400 KELD		- Oldies.
1400 WBAT 1400 WRCC	, MI Battle Creek	- ABC Adult Standards.
	WA Othello	- Contemporary Christian, Spanish, Prime
1400 KKSC	WA Othero	Sports.
1410 WPCC	SC Clinton	- Prime Sports.
1410 WPOP	CT Hartford	- One on One Sports.
1420 WBRD	FL Palmetto	- Reach Southern Gospel.
1430 CKCY	ON Toronto	- Ethnic, mostly Chinese.
1430 WNWZ	TN Germantown	- CSN Childrens programming.
1440 WGVL	SC Greenville	- Reach Southern Gospel.
1430 WNWZ		- CSN Childrens programming.
1430 WMAK		- Back on air with adult standards.
1450 KEZJ		- Jazz and sports // KBSU.
1450 WNBY	MI Newberry	- Talk.
1460 WFMH	AL Cullman	- Reach Southern Gospel.
1460 WFMH 1470 WTOE	NC Spruce Pine	- WW-I Adult Standards.
1470 WTKO	NY Ithaca	- Sports.
1470 WLQR	OH Toledo	- ABC Urban Gold.
1480 KWIZ	CA Santa Ana CO Pueblo TX Pasadena WY Cheyenne CO Manitau Springs IA Indianola LA Houma	- Brokered ethnic.
1480 KRRU	CO Pueblo	- Bloomburg Business //KXRE.
1480 KLVL	TX Pasadena	- Brokered ethnic.
1480 KRAE	WY Cheyenne	- Prime Sports and oldies.
1490 KXRE	CO Manitau Springs	- Bloomburg Business.
1490 KBAB	IA Indianola	- JSN Adult Standards.
1490 KJIN	LA Houma	- Black gospel.
1300 WGEN	IL Geneseo	- Adult contemporary // FM.
		- Country music.
1520 WQWQ		 Contemporary Christian. Massachusetts Radio Reading Service (probably
1530 WCEG	MA Middleborough	for the visually - impaired - TF).
1540 KXMG	CA Los Angeles	- Spanish oldies, mostly from the 1970's.
1540 WBIN	TX ?	- Reach Southern Gospel.
1570 WTWB	FL Auburndale	- Reach Southern Gospel.
1570 WXLN	IN New Auburn	- Reach Southern Gospel.
1590 KMOZ		- Adult Contemporary // FM.
1590 KIRS	NV Sun Valley	- All Catholic.
1600 WOCO	NV Sun Valley DE Dover KY Hartford	- Ex-WKEN, now 1970's oldies.
1600 WSNR	KY Hartford	- Prime Sports.
1600 KATZ	MO St. Louis	- Blues and talk.

Well this is all that I have now. Do send your area radio format changes in to your formats column......the above has brought "Narrowcasting" to new extremes! You may use either the U.S. Postal Service, or my E-Mail box, Akftrain @ aol.com. 73's

Confirmed Ken MacHarg kmacharg@hcjb.org.ec

DX'er

HCJB - Box 39800 - Colorado Springs, CO 80949, or HCJB - Box 17-17-691 - Ouito, Ecuador (.5 oz.: 50¢)

Your successes in obtaining QSL's and other station items

Here we go again with another good list of verifications in from club members:

NORTH AMERICA

CANADA

ALBERTA, , 960, Calgary, f/d letter in 3 weeks. V/s Robin Hildebrand, Office Manager. (Rolph--NZ)

BRITISH COLUMBIA, KFUN, 1410, Vancouver, N/d "our report was correct" letter in 54 days plus program guide. V/s Edie Jarvis, Receptionist. (Heinen-CO)

BRÎTISH COLUMBIA, CJDC, 890, Dawson Creek f/d letter and sticker in 15 days. V/s Glen Foisy, CE. (Heinen--CO)

ONTARIO, CIGM, 790, Sudbury, verie letter, map and stickers in 65 days. V/s Scott Sloan, Dir. Eng. (Pote-IN)

ONTARIO, CIGM, 790, Sudbury, p/d letter, sticker and map for IRCA test. V/s Scott Sloan, CE. (Reiser--IL)

ONTARIO, CIBC, 800, Toronto, OSL card in 60 days. V/s Dean Bellavese. (Trelford--IA)

USA

ALASKA, KJNP, 1170, North Pole, f/d huge folder plus letter, stickers, calendar, newsletters and tons of information in two months. Verification was for reception received about 100 yards from the tower while we were guests of KJNP in September. V/s Don Nelson, President. (MacHarg--EC)

ARKANSAS, KWXI, 670, Glenwood, p/d letter with coverage map in 65 days after third follow-up. V/s Tom Nichols, Pres. (Heinen--CO)

CALIFORNIA, KRDU, 1130, Dinuba, letter in 105 days. V/s David Hofer, Pres. Also received letter from Richard Dahiquist, CE. (Rolph--NZ)

CALIFORNIA, KXBT, 1630, Vallejo, personal hand-written confirmation with bumper sticker and coverage map. V/s Ralph Jones. (Kureth--MD)

COLORADO, KBZS,620, Grand Junction, f/d letter in 5 days. V/s Ken Pilling, Eng. (Wilkins--CO) CONNECTICUT, WLIS, 1420, Old Saybrook, verification letter, Whalers schedule, bumper sticker,

connecticut, WLIS, 1420, Old Saybrook, verification letter, Whalers schedule, bumper sticker coverage map, station info in 7 days. V/s Todd Young. (Kureth--MD)

FLORIDA, WMEL, 920, Melbourne, note on coverage map in 41 days. V/s John E. Harper, Owner, Pres. (Trelford--JA)

FLORIDA, WZAZ, 1400, Jacksonville, letter and reply indicating it was not their station! V/s Phil Tuck, CE. (Trelford--JA)

GEORGIA, WGOV, 950, Valdosta, bumper sticker with confirmation written on original letter. (Trelford--JA)

GEORGIA, WGST, 690, Atlanta, card. V/s illegible, CE. (Trelford--JA)

INDIANA, WHLY, 1580, south Bend, verification letter and folder in 67 days. V/s Mike Shannon, OM. (Pote--IN)

MASSACHUSETTS, WJDA, 1300, Quincy, letter, sticker in 11 days. V/s James D. Asher, Pres. (Trelford--JA)

MASSACHUSETTS, WNRG, 1510, Boston, letter, info sheet, program schedule in 280 days. V/s Rose Miller. (Trelford--JA)

MICHIGAN, WJR,760, Detroit, QSL in 9 days, V/s Ed Buterbaugh CE and Al Mayers, OM.

(Pote--IN)
MICHIGAN, WUFL, 1030, veri letter, sticker, pamphlet and cassette of Christian children's group
Psalty for my 6 year old (!) in 2 weeks. In my report i mentioned hearing a promo for Psalty

concert and that my daughter likes Psalty music. (Moore--IA)
MINNESOTA, KJJK, 1020, Fergus Falls, /d letter in 34 days. V/s Bud Nornes, GM. (Wilkins--CO)

MINNESOTA, WCCO, 830, Minneapolis, QSL card in 26 days. (Pote--IN)

MINNESOTA, WCTS, 1030, Maplewood, f/d letter, sticker, program guide in 17 days. V/s Dennis Whitehead, mgr. (Wilkins--CO)

MINNESOTA, WIMN, 1220, Stillwater, verie letter in 22 days. V/s Daniel Smith, (Pote--IN)

MISSOURI, KATZ, 1600, St. Louis, p/d letter in 14 days after f/up. V/s Daryl McQuinn, CE. (Wilkins--CO)

MISSOURI, KOTC, 830, Kennett, verie letter sticker and coverage map in 40 days. V/s Mike Scallorns, PD. (Pote--IN)

NEBRASKA, KRVN, 880, Lexington, elaborate QSL, map, sticker and history in 164 days after f/up.

NEW YORK, WCBS, 880, New York City, OSL card in 56 days. (Pote--IN)

NEW YORK, WGY, 810, Schenectady, verie letter and sticker in 9 days. V/s Bob Blanchard, CE.

NORTH DAKOTA, KOFN, 1550, West Fargo, ppd/card in ten days after f/up. V/s Aaron White,

OHIO, WTAM, 1100, Cleveland, p/d letter, key ring in 20 days. V/s K. M. Yarham, programming. (Wilkins--CO)

OKLAHOMA, KCLI, 1320, Clinton, p/d letter, profile sheet in 26 days. V/s Pamela Olson, sales.

OKLAHOMA, KVOO, 1170, Tulsa, p/d letter in 4 months after f/up. V/s Joe Hancock, CE. (Rolph-NZ)

PENNSYLVANIA, WICK, 1400, Scranton, notes on computer print out of programs in 29 days. V/s Don Pregnow, (Trelford-IA)

OHIO, WCKY, 550, Cincinnati, station almanac, stickers in 8 days. (Pote--IN)

OKLAHOMA, KVOO, 1170, Tulsa, 12 page folder with history, personalities, maps and 2 business cards in 20 days, V/s Joe Hancock, CE and Ric Hampton, Engineer, (Pote-IN)

OREGON, KEX, 1190, Portland, care in 28 days. (Trelford--JA)

OREGON, KUIK, 1360, Hillsboro, p/d letter, sticker, program guide and T-shirt in 42 days, (Rolph-NZ)

TEXAS, KAAM, 620, Plano, f/d postcard in 24 days, V/s Hue Beavers, (Heinen--CO)

TEXAS, KAAM, 620, Plano, verie letter in 28 days. V/s Hue Beavers, GM. (Pote-IN)

TEXAS, KBNA, 920. El Paso, f/d letter for IRCA test, bumper sticker and coverage maps in 20 days, (Heinen-CO)

TEXAS, KGBC, 1540, Galveston, n/d letter, sticker, hurricane tracking chart in 13 days. V/s Glenn Chisman, PD. (Wilkins--CO)

TEXAS, KIJN, 1060, Farwell, note in reception report in 6 days. V/s Gil W. Patschke, Mgr. (Wilkins--CO)

TEXAS, KLSR, 1130, Memphis, form letter in 7 days plus bumper sticker. V/s Joe Davis, Owner/GM. (Heinen--CO)

TEXAS, KTNZ, 1010, Amarillo, p/d letter in 13 days. V/s Dayton Martin, Asst. PD. (Heinen--CO) WISCONSIN, WHFR, 1320, Wisconsin Rapids, returned report form with notation in one week. business card. V/s Miles G. Knuteson, VP and GM. (Reiser-IL)

WISCONSIN, WTSO, 1070, Madison, f/d letter in 15 days. V/s Dan Masucci, PD. (Heinen-CO)

WYOMING, KKTY, 1470, Douglas, f/d letter in 9 days. V/s Dennis Switzer, O/GM. (Heinen-CO) WYOMING, KIIL, 1370, Chevenne, n/d letter in 19 days, V/s Paul Montoya, (Wilkins-CO)

OUTSIDE OF NORTH AMERICA

DOMINICAN REPUBLIC, HIAJ, 1570, Santo Domingo, letter, card in 51 days. V/s Joel Calderon Lithgow. (Trelford-IA)

NETHERLANDS ANTILLES, Radio Hoyer II, 1500, f/d prepared card in 20 months for reception from Venezuela. (Moore--IA)

MEXICO, XETOL, 1130, Toluca, ppd/card, n/d letter in 127 days after f/up. V/s Ramiro G. Aguilera O., Gerente de Mercadotecnica. (Wilkins--CO)

OTHER STUFF

COLORADO, "KRCX" 1490, Regis University, Denver, ppd/card in 74 days after f/up. V/s Brian Elms, GM. (Wilkins--CO)

COLORADO, WMSV510, Colorado DOT, Denver TIS, ppd/card in 18 days, V/s Carl Sorrentino, (Wilkins--CO)

COLORADO, WNEN689, 890, Coors Field TIS, Denver TIS, ppd/card in 9 days plus letter and Rockies sticker. V/s Steve Jikolajczak, Stadium ops. (Wilkins--CO)

Thanks to those who contributed to this go round. They include: Wayne Heinen, Aurora, Colorado, Joe Kureth, Uniontown, Maryland, Ken MacHarg, Quito, Ecuador, Don Moore, Davenport, Iowa, Robert Pote, Greenwood, Indiana, Thomas Reiser, Chicago, IL, Michael Rolph, Inverell, NSW, Australia, Don Trelford, St. Anns Bay, Jamaica (sounds like my kind of place-Ken) and John Wilkins, Wheat Ridge, Colorado.

I notice that some of our reporters are having problems with Latin American (Spanish) names. Most Latin Americans are big on titles. North Americans use them sparingly, for example for Doctor, Reverend, Father, Governor, Mayor, Senator, President and Professor, but not a whole lot more. Almost everyone in Latin America uses the title. Some of the most common are: Ara. (Architect), Ing. (Engineer), Dr. or Dra. (Doctor, Masculine and feminine), Abg. (Lawyer), Econ. (Economist), Lic. (Licenciado-it means a person holds a B.A. degree and may not have any particular professional reference.) A word of caution, when someone uses Dr. or Dra. it may not mean they are a medical doctor. For some it will mean they have a PhD from a U.S. or local university. For others in a country such as Ecuador it means they have a Doctorado degree which is equivalent to a Masters degree in the U.S. In any case, when in doubt, use the title, it is very important. Add to this the complications of Latin names. Most people use three names, the first being their given name, the second being their surname, the third being their mother's surname. Don Moore has an excellent article on this at his web (http://www.mcrest.edu/~moore/latindir/names.html). Best wishes until next time. --Ken

Once-secret radio station is silenced

once broadcast Duke Ellington live and coded news of the A-bomb's success

Santa Fe New Mexican -via Michael Parish

unsuccessful, he said, because most potential buyers these days want FM stations

As of Jan. 10, the down-home AM station became a part of Los Alamos history.

Like Los Alamos itself, KRSN — originally known as KRS — came into being because of the Manhattan Project, the top-secret project on the isolated mesas of the Pajarito Plateau that developed the first atomic bomb during World War II.

Bob Porton came to Los Alamos from Florida in 1944 as a member of the Army

It was his job to help keep up morale in the closed community of 6,000. He coordinated dances and athletic activities, ran two small movie theaters and managed the tiny radio

He remembers the lunch-hour scene on July 16, 1945, when he and co-workers were surprised to find the control room at the small Army-run station filled with 35 to 40 Manhattan Project scientists.

Tension increased as KRS - Kommunity Radio Service - began broadcasting Bol Lloyd's 12:45 p.m. news broadcast from KOB

radio in Albuquerque.
"He began his newscast by saying that the commanding officer of the Alamogordo air base announced this morning that a huge ammunitions dump had blown up there, but there were no injuries," Porton recalled.

Pandemonium broke out in the control

"All the scientists in the control room laughed and applauded and slapped each other on the back," Porton said. "That was their first knowledge that the (Trinity) test had succeeded."

The scientists and military security had fabricated the story in advance to offer a plausible explanation to those who might see or hear the explosion of the first atomic bomb in the desert near Alamogordo. The fact the story was released to the news media indicated the bomb had successfully detonated. Porton said.

Like the rest of Los Alamos, KRS was veiled in secrecy. Its signal was linked to the town's power supply network rather than broadcast into the atmosphere. Capacitors on the power grid at the edge of town blocked most of the signal from escaping "the Hill," said Porton.

No on-air reference was ever made to Los Alamos, nor were last names used or any information given that would give away Los Alamos' existence, he said.

That secrecy made for rough going for the

BY KATHLEENE PARKER The New Mexican

LOS ALAMOS - During a recent snowstorm, Los Alamos residents arose, plugged in their coffeepots and switched on radio station KRSN-AM, which for more than 50 years had been a source of local news.

But instead of announcements about road conditions and school closures, listeners were greeted with silence at 1490 on the AM dial.

KRSN, long a presence in the community,



Bob Porton poses with two of his favorite pieces of memorabilla from the years he man-aged Los Alames' first radio station: a 1948 autographed photograph of Duke Ellington and the KRS call letters that used to sit on

station. Because Los Alamos officially did not exist, neither did the station, and so it couldn't get funding from the Armed Forces Radio Network, said Porton. That meant surviving on a shoestring and broadcasting only a few hours a day.

"If we didn't have an album to play that night, we'd call on a scientist — (Robert) Oppenheimer, Louis Rosen, (Edward) Teller and Hans Bethe - and borrow it and play it and return it the next day," Porton said.

The Army held dances and used the profits to buy records for the station, he said. Teller read Hans Christian Andersen sto-

ries into what was, by today's standards, a primitive wire recorder. The stories were played on the air for chil-

dren until the device broke and could not be epaired, Porton said. With the end of the war, and acknowledgement that Los Alamos existed, the station

finally was fully funded. "We were sent a very fine transmitter instead of the nuts and bolts we had," Porton

Owner Dean Burns, whose father, Darrel, bought the station in 1956, said the station was a victim of Los Alamos' shrinking retail community and a lack of support from merchants.

"I was brought up with the idea you try to serve other people, but that just isn't possible anymore," said Burns. "I have made all the cuts that are humanly possible, and it just did-

Attempts to sell the station have been

said. "The big news was we went full time," and hooked into the United Press International wire service.

Porton is proud of the fact that the radio station helped draw big-name talent to Los Alamos during the early post-war years. Duke Ellington, Henry Busse and Count Basey were among those who played at the radio station and at dances on the Hill.

In April 1948, the station moved from the "Big House" at the former Los Alamos Ranch School to the Los Alamos Community Center downtown, where it remained until the 1960s, when it moved to North Mesa. In 1949, the government sold the station, by then called KRSN, to a private owner, who sold it to Darrel Burns and Virgil Parker in

Burns eventually bought out Parker and ran the station until about 1988. Burns is described by his family and former employees as a man who believed in community

Under his guidance, the station broadcast county council meetings live for years, sponsored visits by the Easter Bunny - often played by Burn's son, Dale - and visits from Santa Claus, played by Burns.

Burns, who died in 1991, helped form the Los Alamos Chamber of Commerce and the Community Chest, the predecessor to the Los Alamos United Way. The station sponsored a "home show" twice a year for merchants and fall auto shows, since "the Hill" had no car dealerships

Disc jockey Bruce McGrath, who worked for the station for 33 years, described the music programming format as a smorgasbord of adult contemporary music, rock 'n' roll, "elevator" music and classical and Broadway music mixed with news - a format designed to offer something for everyone in the community.

The station broadcast at 5,000 watts and could reach clear to Santa Fe "on a good day," said McGrath, although the Federal Communications Commission used to require the station to reduce its nighttime wattage to 250.

At its peak during the 1980s, the station had about 20 employees, said Dean Burns, but it had only three employees at the time it went off the air.

All have found work elsewhere or have been absorbed into KRSN's surviving sister station, KNLA, at FM 101.

KNLA, which has an "oldies, but goodies" format, is the only remaining radio station in

Target DX

Bruce Conti BACONTI@sol.com 46 Ridgefield Drive Nashua, NH 03062-1174

DX'ing 'smart', with shared tips and requests by NRC members

Broadcast Band DX Buyer's Guide

This edition of Target DX is in response to a recent request in DDXD-West for information on equipment and where to buy it. Originally, I was only going to cover outboard gear. But with the wide array of receivers available today, it seemed that a listing of the major brands would also be useful.

At the risk of stating the obvious, here are a few qualifying statements to keep in mind. Comparison shopping is encouraged before making any significant purchase. Request catalogs from the various distributors to compare prices and return Carefully review manufacturers' policies. specifications to determine whether or not a product will meet the requirements of your specific application. Distributor catalogs often list vital statistics, or specifications may be requested directly from the manufacturer. The list is not exhaustive. I tried to identfy equipment commonly used by DXers as reported in DX News, along with some relatively unknown but interesting products for informational purposes. Omissions from this listing are not intentional and should not be considered blanket rejection of a product or distributor. Comments are included based upon personal knowledge or experience, but should not be considered an endorsement of one product over any others.

Contributions are welcome. If you know of any additional products or distributors that would be of interest to fellow broadcast band DXers, send the information to Target DX for inclusion in future editions. I'm especially interested in comments from anyone who's had experience with some of the new technologies and lesser known products, such as the WiNRADiO computer receiver, Worldcom and Eldon loops, and DSP audio filters.

Receivers

AKD

Boulton Road, Stevenage, Herts SG1 4QG, England Model: Target HF3

Comments: A new economical entry-level table top receiver, industrial design similar to Lowe.

· AOR Ltd.

Adam Bede High Tech Centre, Wirksworth, Derbyshire DE4 4BG, England

Models: AR3030, AR5000, AR7000, AR7030

Comments: The AR7030 is a new top-of-the-line model introduced in 1996, around \$1200, which breaks new ground in receiver design with microprocessor technology, featuring IR remote control, greater than 100 dB d-range, and multiple

IFs that can be upgraded to superior ceramics, active filters, and Collins mechanical filters, powered by external AC adapter or 15 VDC. The AR5000 features continuous coverage 10 kHz - 2.6 GHz, except for cellular phone frequencies. The AR7000 is soon to be released, 100 kHz - 2 GHz, with spectrum analyzer display.

· Baygen Power Co. Ltd.

89 St. Patrick Rd., Johannesburg, 2198 South Africa Model: "Freeplay"

Comments: Powered by wind-up Baylis generator, no batteries or external power source required, analog slide-rule dial, AM, FM, 3-12 MHz SW.

· R.L. Drake Company

230 Industrial Drive, Franklin, OH 45005

(513) 866-2421

Models: SW1, SW8, R8A.

Comments: The R8A represents Drake's top-of-the-line, the long-awaited follow-up to the modern-day classic R7, \$1100, 100 dB d-range, 10 Hz tuning resolution, features include multiple IFs (not ungradeable with standard ceramic/mechanical filters), pass band, audio notch, fast and slow AGC, wide and narrow noise blanking, internal AC power supply or external 12 VDC operation. The R8A incorporates several improvements over the original R8, including additional pushbuttons for mode and bandwidth selection, and a detachable line cord. SW8 is entry-level model, AC/battery operation, upgradeable IF filters. SWI is mid-range table top receiver (looks like a scaled-down R8A).

• GE (General Electric) Model: Superadio III

Comments: AM/FM portable, TRF design for long range AM reception, analog slide-rule dial, AC/battery operation, about \$60, available from department stores such as K-Mart, pre-installed FM SCA upgrades available through some mail-order distributors. Performance of Superadio I and II

predecessors is considered better than Superadio III.
• Grundig

USA: (800) 872-2228 (415) 361-1611

Canada: (800) 637-1648

Models: Yacht Boy 400, Satellit 700, others.

Comments: Entry-level economical portables. Satellit 700 includes built-in NiCad battery charger, 160 - 353 kHz LW, 528 kHz - 30 MHz MW/SW, and FM frequency coverage, \$450, memory expansion upgrades available.



1COM America, Inc.
 2380 116th Ave. NE, Bellevue, WA 98004
 www.icomamerica.com

Models: R10, R100, R8500, comm/gov't issues. Comments: R8500 is latest high-end model, covers 0.1 - 1999.99 MHz, 107 dB d-range, 10 Hz tuning resolution, AC or 12 VDC operation, around \$2000. R100 is a more economical 0.1 - 1856 MHz receiver, requires 12 VDC operation, external power supply not included, \$650. R10 is a new hand-held model replacing the R1, 500 kHz - 1300 MHz. Earlier models R70 and R71 are modern-day classics.

Japan Radio Co., Ltd.
 430 Park Ave., New York, NY 10022
 (212) 355-1180
 Models: NRD-515. NRD-525. NRD-535/D

Comments: NRD-535D is "deluxe" top-of-the-line table top receiver, 106 dB d-range, includes bandwidth control, ECSS, and filter options, \$1700.

 Kenwood Communications Corporation P.O. Box 22745, Long Beach, CA 90801-5745 (310) 639-5300

www.kenwood.net Model: R-5000

Comments: R-5000 is top-of-the-line table top, 105 dB d-range, \$1050, optional IF filter upgrades available.

• Lowe

Matlock, Derbyshire DE4 5LE, England www.lowe.co.uk/

Models: HF-225, HF-225 Europa, HF-250, HF-150. Comments: Simple user interface and compact size are primary characteristics of all models. "Europa" model is upgraded with multiple IF filters for DXing and wired remote keypad entry, around \$1100, 12 VDC operation, external power supply provided, tunes in 8 Hz increments, but feature-deprived compared to other receivers in the same price range, lacking pass band, audio notch, and selectable AGC, frequency display rounded down to nearest 1 kHz, nevertheless a top notch DX receiver. HF-150 is entry-level model.

Panasonic Company
 One Panasonic Way, Secaucus, NJ 07094
 Models: RFB11, RFB45, others.

Comments: Entry-level economical portables.

 Radio Shack www.tandy.com

Models: Realistic "TRF" 12-655, DX394, others.
Comments: Entry-level / budget receivers. 394 is latest table-top model, \$280. "TRF" 12-655 and follow-up models are no longer manufactured, but were popular AM-only portables designed and marketed for long range reception.

Rosetta Laboratories
www.winradio.net.au

Model: WiNRADiO

Comments: Plug-in PC card receiver, covers 0.5 - 1300 MHz, requires Windows 3.1 or 95, NT version soon to be released.

· Sangean America, Inc.

2651 Troy Ave., S. El Monte, CA 91733 (818) 579-1600

Models: ATS 808, ATS 909, ATS 818/CS, others. Comments: Entry-level economical portables, 909 is latest top-of-the-line from Sangean, 818CS features built-in cassette recorder.

Sony Corporation of America

Sony Drive, Park Ridge, NJ 07656

Models: 1CF-2010, 1CF-SW77, 1CF-SW1000T, SRF42 Walkman, and many others.

Comments: Most are entry-level portable receivers. The ICF-2010 is a top-of-the-line portable, around \$350, featuring 150 kHz - 30 MHz, FM, and 116 - 136 MHz air band coverage, selectable side-band synchronous tuning, two IFs which can be upgraded through a third party (see IF Filter Upgrades), battery operated or powered by external supply provided. ICF-SW1000T features built-in cassette recorder and FM stereo. SRF42 Walkman receives AM stereo, apparently no longer manufactured but still available in limited supply from some department stores.

Watkins-Johnson

700 Quince Road, Gaithersburg, MD 20878-1794 (800) WJ-HELPS

Model: HF-1000

Comments: High-end "industrial" rack mount receiver, 58 IF bandwidths, 1 Hz tuning resolution, universal power supply, \$3800.

Yaesu USA

17210 Edwards Road, Cerritos, CA 90701 (310) 404-2700

Model: FRG-100/B

Comments: Mid-range table top receiver, \$590, available options include wired remote keypad and computer interface, IF filters are upgradeable.

Additional Information

Shortwave Receivers Past & Present, Communications Receivers 1945-1996, second ed., January 1997, by Fred Osterman.

Radio Receiver: Chance Or Choice and More Radio Receiver: Chance Or Choice, by Rainer Lichte.

Loop Antennas

· Eldon Electronics

P.O. Box 713, Port Coquitlam, BC V3B 6H9 (604) 532-0170

Models: EEE-195, EEE-195TL

Comments: Ferrite loops, 195TL "Tri-Loop" is an upgraded version of the basic 195 model.

· Kiwa Electronics

612 South 14th Ave., Yakima, WA 98902 (800) 398-1146 (509) 453-K1WA

www.wolfe.net/-kiwa e-mail: kiwa@wolfe.net Models: Kiwa Loop, Poster Loop, Pocket Loop Comments: The "Kiwa Loop" is an air-core loop with regenerative tuning, a mechanical work of art, around \$350. "Poster" and "Pocket" loops are economical air-core designs, inductively coupled to receiver's internal ferrite (no direct connection required).

Palomar

Box 462222, Escondido, CA 92046

Orders: (800) 883-7020 Info: (619) 747-3343

e-mail: 75353.2175@compuserve.com Models: BCB Loop / LA-1 Amplifier

Comments: Ferrite loop plugs into amplifier base, additional plug-ins are available for LW and SW, 9 VDC battery powered.

Radio Plus+ Electronics
 3635 Chastain Way, Pensacola, FL 32504
 (904) 434-3635

Models: "The Quantum Loop", and "Q-Stick"

· Worcester Electronics Laboratory

Models: SM-1 and SM-2 "Space Magnet"

Comments: Shielded 12-inch ferrite loop with twostage pre-amplifier, no longer manufactured.

· Worldcom Technology

1118 Raymond Avenue, Ft. Pierce, FL 34950 (407) 466-4640

Model: NXL-250A

Comments: Amplified loop, standard model covers 540 kHz to 30 MHz, choice of 20-inch or 12-inch loop, and 500-1700 kHz MW version.

Antenna Tuners

WAIION DX Labs

Models: "RL-1" and "RW-1"

Comments: Not commercially available. Plans for assembly available through NRC Reprints. DC voltage varies varactor capacitance for remote control tuning of loop or whip antenna.

· Oak Ridge Radio

P.O. Box 2092, Littleton, MA 01460-3092

www.ultranet.com/~oakridge/

Model: "Byan antenna".

Comments: DC voltage remote controls a Vactrol variable resistance photocell used as a Beverage termination. See article in *DX News*, Vol. 64 No. 14.

Antenna Phasing Units

Purpose: Antenna phasing units provide reception from a single direction such as in a cardioid pattern, by phasing two antennas for phase cancellation of undesired signal(s).

- Dallas Lankford
- WATION DX Labs

Models: "DL" delay-line series.

Comments: Not commercially available. Plans for assembly available through NRC Reprints. Wideband operation advantageous for band scanning and easier to use than LC tank models, but signal loss requires RF amplification in most cases, thus making the delay line design less bullet-proof than the LC tank.

WAIION DX Labs

Models: "MWDX" LC tank series.

Comments: Not commercially available. Plans for assembly available through NRC Reprints. Less sensitive to hostile RF environment than delay line. For advanced DXers, as narrow-band operation makes it more difficult to master the tuning process

than with delay line. Beginners might be more successful starting with a delay line phasing unit.

JPS Communications Inc.

P.O. Box 97757, Raleigh, NC 27624-7757

www.jps.com e-mail: sales@jps.com

Model: ANC-4

Comments: For phasing antenna wire against noise pick-up whip or wire, to cancel locally radiated noise or electrical noise radiating from source(s) within a building.

Audio DSP

Purpose: Digital signal processor (DSP) technology is used to clean-up audio. Most models can be used for removal of noise and hets, and improvement of overall sound quality with band pass filtering and equalization techniques. Don't expect dramatic improvements in difficult to hear DX or excessive noise levels. Many feature presets for sideband, CW, and utility work, and are better suited for these types of applications. A showroom test drive is recommended before buying any DSP unit, such that a decision isn't made based upon unreasonable expectations.

JPS Communications Inc.

Models: NIR-10, NIR-12, NF-60, NTR-1, NRF-7 Comments: NIR-12 is latest model, utilizes dual DSP, \$330. Good customer support, designed for software upgrades when available. Circuitry uses Texas Instruments DSP, from which software development tools are available for custom programming of some NIR models.

MFJ Enterprises, Inc.

300 Industrial Park Road, Starkville, MS 39759 Models: MFJ-752C, MFJ-784B

Comments: 784B uses Analog Devices DSP.

· SGC Inc.

13737 S.E. 26th Street, Bellevue, WA 98005 (800) 259-7331 (206) 746-6310 www.sgcworld.com e-mail: sgcmktg@aol.com

Model: PowerClear

Timewave Technology Inc.
 2401 Pilot Knob Road, St. Paul, MN 55120-1121
 (612) 452-5939

www.timewave.com e-mail: dsp@timewave.com

Models: DSP-9, DSP-59/Y

Comments: Top-of-the-line, high-end models. 59Y is Yaesu speaker-mount version.

IF Filter Upgrades

Kiwa Electronics

612 South 14th Ave., Yakima, WA 98902

Models: Sony, Japan Radio, Yaesu, others.

Comments: The upgrade kit for the Sony ICF-2010 includes easy to follow instructions with clear diagrams, solder and solder-wick are provided, only a soldering iron and some experience are required. Kiwa also installs upgrades for a nominal fee.

Antenna Splitters

Purpose: An antenna splitter allows for more than one receiver to be connected to the same antenna without significant signal degradation.

Industrial Communications Engineering (ICE)
 P.O. Box 18495, Indianapolis, IN 46218-0495

(800) ICE-COMM (317) 545-5412

Models: 112-2A and -4A active antenna splitters. Comments: 1-30 MHz frequency range, 2A permits operation of two receivers from one antenna, 4A permits up to four receivers, powered by external 12 volts DC not included, under \$50, SO-239 or BNC iacks can be specified.

RF Systems

P.O. Box 474, NL-7900 AL Hoogeveen, Netherlands Models: DA-4, SP-2

Comments: DA-4 distribution amplifier permits operation of up to four receivers from one antenna, 10 kHz - 30 MHz. AC powered, \$300.

Longwire Matching Transformers

Purpose: Matches longwire impedance with 50 ohm coax/receiver input impedance, for improved efficiency and noise reduction.

Aurora DX Supply

P.O. Box 71553, Aurora, ON L4G 6S9 Model: Longwire Impedance Matcher Comments: 100 kHz - 30 MHz operation.

Mini-Circuits

P.O. Box 350166, Brooklyn, NY 11235-0003 (718)934-4500

Models: T1-6T (1:1), T9-1 (9:1), many others.

Comments: Above models are 6-pin DIP for homebrew assemblies and experimenters; other styles available. 9:1 matches 560 ohms typical longwire or Beverage impedance to 50 ohms coax/receiver input. 1:1 used for additional isolation.

 Palomar Model: MLB-1

Comments: 500 kHz - 30 MHz operation.

· Watson (UK)

Model: Watson Long Wire Balun Comments: 100 kHz - 40 MHz operation.

Major Distributors

• Atlantic Ham Radio Ltd. 368 Wison Avenue, Downsview, ON M3H 1S9 (416) 636-3636, (416) 222-2506 www.interlog.com/~ahr e-mail: ahr@interlog.com

Electronic Equipment Bank (EEB)
 323 Mill Street, Vienna, VA 22180
 Orders: (800) 368-3270 Info: (703) 938-3350
 www.access.digex.net/~eeb/eeb.html

· Gilfer Shortwave

52 Park Avenue, Park Ridge, NJ 07656 Orders: (800) GILFER-1 Info: (201) 391-7887 www.gilfer.com e-mail: info@gilfer.com

· Grove Enterprises, Inc.

7540 Hwy. 64 West, Brasstown, NC 28902 (800) 438-8155 (704) 837-9200

www.grove.net e-mail: order@grove.net

· Ham Radio Outlet (HRO)

933 North Euclid Street, Anaheim, CA 92801 Western US/Canada: (800) 854-6046

Mountain/Central US: (800) 444-9476

Southeastern US: (800) 444-7927

Mid-Atlantic US: (800) 444-4799 Northeastern US: (800) 644-4476

New England/Eastern Canada: (800) 444-0047

www.hamradio.com
Norham Radio Inc.

4373 Steeles Ave. W., North York, ON M3N 1V7 (416) 667-1000

www.norham.com e-mail: norham@fox.nstn.ca

 Radio Shack www.tandv.com

Locations throughout North America.

Universal Radio Inc.

6830 Americana Pkwy., Reynoldsburg, OH 43068 Orders: (800) 431-3939 Info: (614) 866-4267 e-mail: dx@universal-radio.com





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